# MEA2100-Beta-Screen-System

## Technical Specifications

### General Characteristics
- **Operating temperature**: 10 °C to 50 °C
- **Storage temperature**: 0 °C to 50 °C
- **Relative humidity**: 10 % to 85 %, non-condensing
- **Headstage**: Up to 8 headstages can be connected
- **Dimensions (W x D x H)**: 125 mm x 100 mm x 22 mm
- **Weight with cable, w/o MEA chamber**: 444 g
- **Weight with cable, with MEA chamber**: 484 g
- **Length of the cable**: 3 m

### Integrated Amplifier
- **Number of analog recording channels**: 5
- **Data resolution**: 24 bit
- **Signal input voltage range**: ± 70 mV
- **Bandwidth**: DC to 10 kHz, software controlled
- **Sampling frequency per channel**: Up to 50 kHz, software controlled
- **Input impedance**: 450 MW || 10 pF
- **Integrated Stimulus Generator**: Not in use in MEA2100-Beta-Screen-Systems!

### Integrated Heating Element
- **Temperature sensor type**: Pt 100 with four wire connection
- **Accuracy**: ± 0.1 °C
- **Signal Collector Unit (MCS-SCU)**: Up to 2 Signal Collector Units can be connected
- **Dimension (W x D x H)**: 250 mm x 83 mm x 25 mm
- **Weight**: 300 g
- **4 Inputs for headstages (HS1 to HS 4)**: Lemo connector, EPG.0B.307.HLN
- **1 Connector with 4 analog outputs for LED driver**: Lemo connector, EPG.0B.307.HLN
- **Voltage output of each analog output**: 0 - 5 V
- **1 64-Channel Analog Out connector**: 68-pin MCS standard connector
- **Collector unit to interface board connector**: External power over serial ATA (eSATAp)